

Fletcher's Paint Works and Storage Facility Milford, NH

U.S. EPA | HAZARDOUS WASTE PROGRAM AT EPA NEW ENGLAND



THE SUPERFUND PROGRAM protects human health and the environment by locating, investigating, and cleaning up abandoned hazardous waste sites and engaging communities throughout the process. Many of these sites are complex and need long-term cleanup actions. Those responsible for contamination are held liable for cleanup costs. EPA strives to return previously contaminated land and groundwater to productive use.

YOUR OPINION COUNTS: OPPORTUNITIES TO COMMENT ON THE PLAN

Public Informational Meeting followed by a Formal Public Hearing

Wed., Sept. 12, 2012 at 7 p.m. Both will take place at Milford Town Hall Board of Selectmen Room 1 Union Square Milford, NH 03055 (603) 249-0600 EPA, the lead agency for all Fletcher's Paint Site activities, will be holding a Public Informational meeting to present its proposed plan. EPA will also answer any questions residents may have regarding this proposed plan. EPA will be accepting written public comments on this proposed cleanup plan from August 23, 2012 through September 24, 2012. You don't have to be a technical expert to comment. If you have a concern, suggestion, or preference regarding this Proposed Plan, EPA wants to hear from you be-

fore making a final decision on how to protect your community. Comments can be sent to Cheryl Sprague, Remedial Project Manager by mail, email, or fax (see below).

EPA will also be holding a formal Public Hearing where residents can provide oral comments on EPA's proposed plan that will be entered directly into the public record. If you have a concern or preference or support EPA's proposal, EPA wants to hear from you before making a final decision on how to protect your community. If you have specific needs for the public meetings and hearing, questions about the meeting facilities and their accessibility, or questions on how to comment, please contact Kate Renahan (see below).

SUMMARY OF THE PROPOSED PLAN

After careful study of the groundwater under and just upgradient of the Keyes Field portion of the Fletcher's Paint Superfund Site (Operable Unit 2 or OU2), EPA has determined that no additional cleanup measures for groundwater are necessary because:

- There are no current users of groundwater at Keyes Field and therefore there are no current risks:
- The RI concluded that if the groundwater under the Keyes Field was used in the future, risks for the future hypothetical residential user are from arsenic, a naturally occurring compound in groundwater and MTBE which is believed to be associated with the upgradient petroleum source;

continued >

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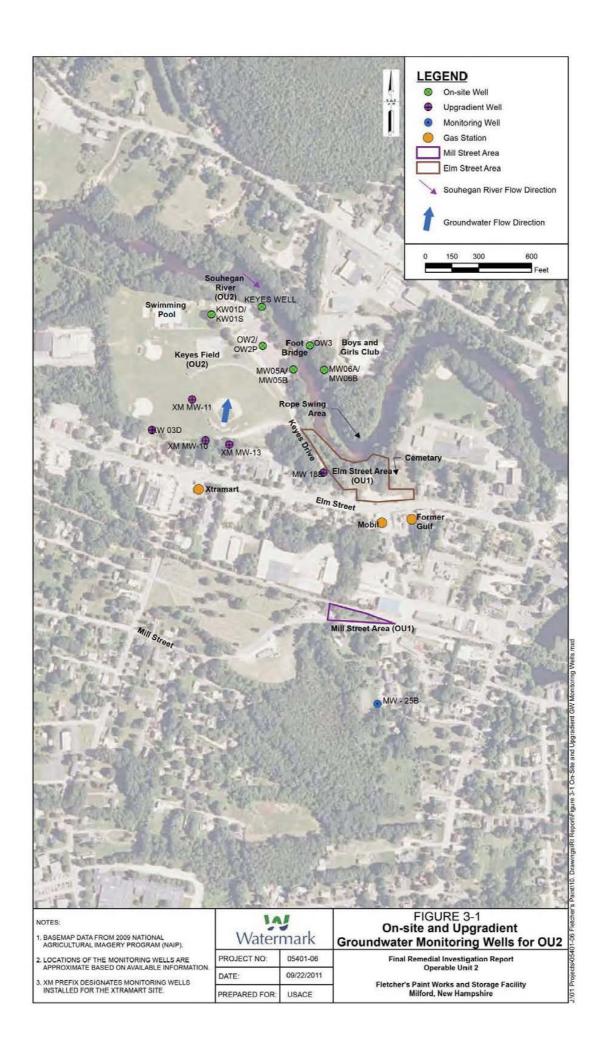
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- While there is the potential in the future that contamination at unacceptable levels could be pulled into Keyes Field from upgradient areas if pumping of groundwater resumes at the Keyes Municipal Supply Well (Keyes Well), these upgradient areas are being addressed by the State and EPA; and
- An Institutional Control in the form of a Groundwater Management Zone (GMZ) under New Hampshire regulations is required for groundwater contamination associated with the upgradient OU1 portion of the Site. Within the GMZ, pumping of groundwater is prohibited and groundwater monitoring is required until drinking water standards are met. The proposed OU1 GMZ includes the OU1 groundwater contamination and the groundwater under the Keyes Field.

EPA supports a No Action approach for OU2 groundwater at the Keyes Field as further action is not necessary to protect human health or the environment.

A CLOSER LOOK AT EPA'S PROPOSAL

The Fletcher's Paint Works and Storage Facility Superfund Site (Site) was listed on the National Priorities List (NPL) in March 1989 after volatile organic compounds were found in the nearby Keyes Well, making the Site eligible for cleanup under EPA's Superfund Program. The Superfund Program targets the nation's most hazardous disposal sites for investigation and cleanup.

In 1991, EPA initiated a Remedial Investigation (RI) at the Site which included the Keyes Field groundwater. During the RI, petroleum contamination from the Xtramart gasoline station located upgradient of the Site was found in groundwater under Keyes Field. This prompted EPA to temporarily suspend investigations at this area of the Site, as under the Superfund law, EPA does not have the authority to respond to releases of pure petroleum. Instead, New Hampshire took the lead in addressing this petroleum release under state law.

EPA resumed sampling of groundwater under Keyes Field in 2007 and again in 2009. This data and the Human Health Risk Assessment for Keyes Field Groundwater are found within the OU2 RI which was released in September, 2011.

This RI found that wells within the Keyes Field proper no longer contained any Site related compounds or the petroleum contamination as previously found, and that the substances that are found are MTBE, an additive to petroleum and arsenic, a naturally occurring compound in groundwater. A review of data from the sampling of other monitoring wells surrounding Keyes Field continued to show high levels of chlorinated VOCs, PCBs and petroleum related groundwater contamination at two upgradient areas: Fletcher OU1 and the Xtramart petroleum release.

EPA can determine that no action is warranted at a Site or a portion of a Site when a previous response has eliminated the need for further remedial response. Based on the information in the Administrative Record, EPA has determined that a No Action response is warranted for OU2 groundwater under Keyes Field for the following reasons:

- 1) There is no current threat to human health and the environment because there are no current users of groundwater at the Site; and
- 2) A previous response action required at the OU1 portion of the Site has eliminated the need for a further remedial response at OU2 as this OU1 response addresses potential future risks to human health from migration of upgradient contamination (Fletchers OU1) to Keyes Field if the Keyes Well was used in the future.

EPA's OU1 ROD requires that groundwater be restored to drinking water levels and requires contaminated soils, acting as a source of contamination to groundwater, be addressed (removed and treated/disposed of or contained). In addition, Institutional Controls are required as part of OU1 to prevent the use of groundwater, to monitor and prevent contaminant migration and to monitor contaminant concentrations until

drinking water standards are met. The Institutional Control for OU1 is a Groundwater Management Zone (GMZ) under New Hampshire regulations. The proposed OU1 GMZ defines the area where the use of groundwater is restricted and monitoring required. The proposed OU1 GMZ (See Figure 3-6) includes the groundwater contaminated by the OU1 source areas as well as the groundwater under the Keyes Field and will prevent the use of the Keyes Well in the future. Because this GMZ will prevent the Keyes Well from being used, it will prevent upgradient contamination from migrating to the Keyes Field.

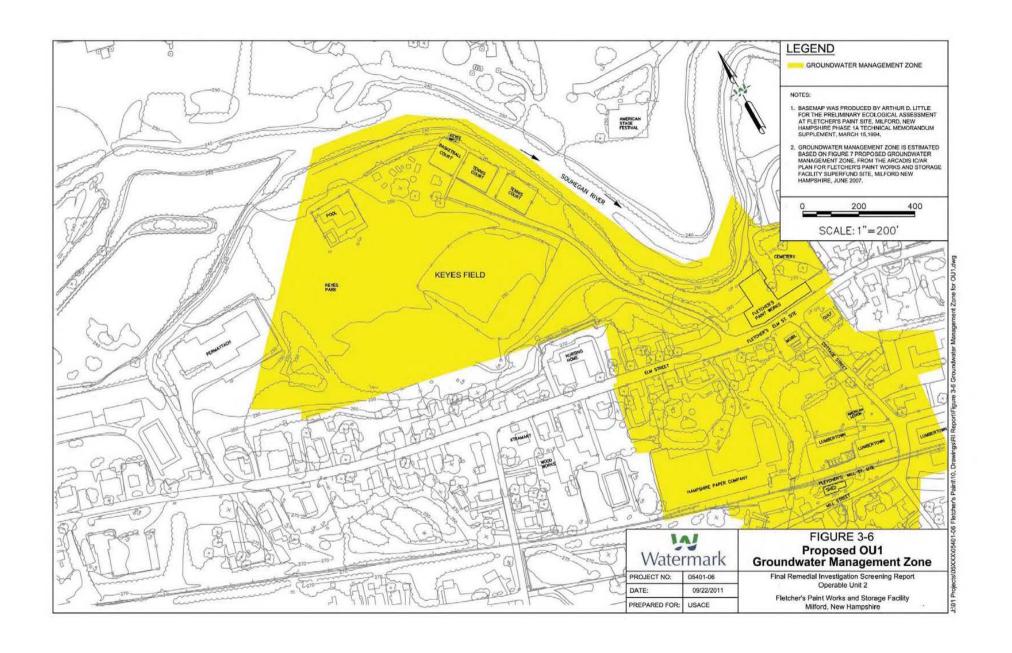
Because this GMZ is proposed and is being implemented as part of the OU1 remedy, EPA will monitor the status of this GMZ to insure that it sufficiently restricts activities at Keyes Field in the long term. If sufficient restrictions are not put in place, EPA will issue another decision document to address OU2 groundwater.

NHDES recently completed a Use and Value Determination for Groundwater at and near the Site in May 2012 and determined that groundwater has a medium use and value. The groundwater under the Keyes Field is considered a potential drinking water source, however, the Town of Milford has indicated it does not plan to use Keyes Well in the foreseeable future and is contemplating decommissioning the well. The Town is exploring use of groundwater for drinking water in an area west of the Site.

NHDES, the support agency for Site activities, has been actively involved in all substantive discussions regarding the Site and the cleanup. NHDES has indicated its support of No Action as identified in this Proposed Plan for OU2 groundwater under the Keyes Field.

SCOPE AND ROLE OF THIS PROPOSAL

As with many Superfund Sites, the problems at the Fletcher's Paint Site are complex. To better address conditions at the Site, EPA divided the Fletch-



er's Site into two separate operable units (OUs).

OU1 addresses the former Fletcher's properties on Elm and Mill Streets and associated groundwater contamination while OU2 addresses groundwater under Keyes Field and PCB contamination within the Souhegan River (adjacent to and downstream of the OU1 area). A Record of Decision was issued for OU1 in 1998, and amended in 2009 requiring excavation and off-site disposal/ treatment of approximately 28,000 cubic yards of PCB contaminated soils and the construction of an engineered soil cover over the residual low level of PCB contaminated soils. The OU1 remedy also includes establishment of a GMZ to prevent the use of groundwater and to monitor contaminant concentrations until cleanup levels are met. The OU1 remedial design is being finalized and response actions are expected to start in 2012 to address this portion of the Site.

EPA separated the Site into two OUs when petroleum compounds were found in the Keyes Field groundwater and PCB contamination was found in fish in the Souhegan River. This prompted the need for additional studies within those areas. Remedial Investigations have been conducted from 2007 through 2009 on groundwater at the Keyes Field and from 2004 through 2012 at the Souhegan River portion of OU2. The Baseline Human Health and Ecological Risk Assessment for OU2 for the Souhegan River was released in 2011. Unacceptable risks were found from ingestion of PCB contaminated fish and to a lesser extent from direct contact with and ingestion of PCB contaminated sediments. Ecological risks are also related to the uptake of PCB contaminated sediments into the food chain. A Feasibility Study is being conducted to evaluate alternatives to address contaminated sediments within the study area. This study is expected to be released by 2013 and will be followed by a final record of decision to address sediment at the Site.

This Proposed Plan addresses OU2 groundwater under the Keyes Field. With the closure of the Keyes Well, groundwater contamination from the OU1 area flows north toward the Souhegan River. The contamination found in groundwater

under the Keyes Field is no longer present, with the exception of a single exceedence for MTBE and arsenic. There is no current use or exposure to groundwater at the Site and therefore there is no current risk. Future hypothetical risks are primarily related to the potential migration of contaminants into the Keyes Field from upgradient sources resulting from future use of the Keyes Well. These upgradient sources are currently being addressed under Federal and State regulations.

SITE DESCRIPTION AND HISTORY

Fletcher's Paint manufactured, stored, and sold paints and stains for residential use from 1949 to 1991. Annual production was 25,000 to 35,000 gallons of both water-based paints and solventbased oil paints. Manufacturing occurred at the Elm Street Area, and a wood-frame building in the Mill Street Area was used for storage of bulk paint pigments. During the Fletcher's Paint operations, hundreds of drums of hazardous substances were stored outside at both the Elm and Mill Street Areas, ultimately leading to the release of various hazardous substances. Although polychlorinated biphenyl compounds (PCBs) were not extensively used in the paint operations, "scrap pyranol", which contained various mixtures of PCBs, trichlorobenzene (TCB), and trichloroethylene (TCE), was brought to the Site and a portion resold for other non-paint related purposes such as a dust suppressant, heating oil, and as a compound for the roofing cement industry. The Fletcher's Paint Works also used the scrap pyranol to suppress the dust at the Elm Street facility. These various activities, as well as leaks and spills resulting from improper storage of these materials, resulted in significant contamination of soils and groundwater and the migration of contaminants into the Souhegan River and Keyes Well, while it operated.

The OU1 portion of the Site is generally comprised of the approximately 2 acre Elm Street Area and the 0.5 acre Mill Street Area, located roughly 800 feet south of the Elm Street Area and associated groundwater contamination which is found in both

the overburden and bedrock aquifers from the Mill Street Area to the Souhegan River. The most significant source to the groundwater contamination is within the Mill Street Area.

The OU2 Keyes Field portion of the Site, is approximately 19 acres, is bordered by Elm Street and the Souhegan River and is used for the town's recreational activities including baseball. soccer, tennis, swimming and as a picnic and play area. A small structure housing the Keyes Well is located on-site on the northern end near the Souhegan River. From 1960 to 1984, groundwater was the sole source of drinking water for the Town of Milford. An estimated 80% of Milford's population relied on the municipal water supply system. Keyes Well operated from 1972 through 1984, is 18 inches in diameter, 60 feet deep and screened in gravel. The Town currently utilizes groundwater from the nearby Curtis wells and a connection to the nearby Pennichuck Water Distribution System for municipal water supply.

The Keyes Field is situated along the southern extent of the Milford-Souhegan Aquifer System. This glacial aquifer is approximately three miles long, extends from the town of East Wilton to the Milford town center and has an approximate width of one-half mile. The Milford-Souhegan Aquifer is locally defined by a discontinuous veneer of clayey silt with gravel (lower glacial till) that ranges in thickness from zero to four feet. Hydraulic communication exists between the bedrock and overburden aquifers.

The Souhegan River is located on the northern edge of the Keyes Field and the Fletcher's Paint Elm Street Area and flows from west to east through the Town of Milford. The river eventually discharges into the Merrimack River, which is located about 12 miles downstream of the Site.

WHY ISN'T CLEANUP NEEDED?

Contaminants-Keyes Field

Past industrial operations at the OU1 area of Fletcher's Paint Site and at a nearby gasoline sta-

tion likely resulted in the contamination of the groundwater under the Keyes Field during the early 1980's, when the Keyes Well was in operation. Low levels of chlorinated VOCs and petroleum related compounds were originally found in the Keyes Well in 1984. EPA sampling in the 1990's found significant petroleum contamination in groundwater under the Keyes Field from an upgradient release at the Xtramart gasoline station.

Evaluation of groundwater sampling data collected within the Keyes Field from 2007 through 2009 indicate that groundwater under the Keyes Field currently meets Federal and State drinking water standards with the exception of methyl tert butyl ether (MTBE) and arsenic. Arsenic was found at a level slightly above the Federal and State drinking water standard; is naturally occurring in NH groundwater and is not considered a Site related contaminant. MTBE is an additive to and associated with the petroleum release upgradient of the Keyes Field, which is being addressed under NH regulations.

Contaminants-Upgradient

Contaminants found in groundwater at Xtramart and in the OU1 groundwater upgradient of Keyes Field include chlorinated VOCs (Trichloroethylene, 1,2-dichloroethane), SVOCs (1,2,4 trichlorobenzene), PCBs and metals (manganese), as well as petroleum related compounds (including benzene, ethylbenzene, toluene) at levels that exceed Federal and State drinking water standards.

Risk and Exposure Pathways Considered

Exposures occur when people eat, drink, breathe or have direct skin contact with a substance or waste material. Based on existing or reasonable anticipated future land use, EPA develops different exposure scenarios to determine potential risks, and appropriate cleanup actions, as needed to meet the site cleanup goals.

A human health risk assessment was conducted as part of the 2011 OU2 Remedial Investigation which included an evaluation of potential cancer risks and non-cancer health effects as a result of exposure to Site contaminants in groundwater (assuming no additional remediation is performed) and to help evaluate whether or not

remedial response actions are warranted.

The RI distinguished data from wells located on Keyes Field which characterized groundwater currently under Keyes Field and upgradient wells which characterized groundwater which could migrate to Keyes Field in the future should the use of Keyes Well be resumed to meet potential future water needs at Keyes Field or the surrounding community. Currently there are no uses of groundwater at the Site or within the Keyes Field recreation area. All of the water used at the Keyes Field (drinking, showering, sanitation, irrigation and filling the pool) is municipal water obtained from other sources. There is no current exposure to groundwater and therefore there is no current risk.

The Risk Assessment also evaluated future risk should the Town of Milford consider reactivating the Keyes Well as a municipal supply. The results of the risk assessment for various receptors (future park user, future park worker, and future resident) to groundwater currently under the Keyes Field indicate that cancer risks are within the EPA's acceptable risk range of $1\times10-6$ to $1\times10-4$ and below the non-cancer Hazard Index of 1 for a future park worker or park user. The cancer risk range was slightly exceeded (2x10-4) for a hypothetical future residential user of groundwater and nearly all of the risk resulted from the potential ingestion of arsenic in groundwater. MTBE was found in one well (KW-01D) at 50 ug/l, above the NH drinking water standard of 13 ug/l. MTBE is an additive to petroleum, and previously detected in groundwater at the upgradient petroleum release. MTBE is monitored for, but has not been detected above drinking water standards at the upgradient petroleum source in several years. Arsenic is naturally occurring in NH groundwater. Arsenic was found in one of ten samples and only in the 2007 sampling event at a concentration of 11 ug/l, which is just above the drinking water standard of 10 ug/l.

Arsenic is not considered Site related, but is required to be monitored for within the OU1 GMZ, to ensure that all drinking water standards are met in the future, Under CERCLA.

EPA cannot cleanup contaminants at a Site below natural background concentrations. In lieu of conducting a background study at OU1, arsenic is required to meet the 10ug/I drinking water standard.

Results for the sampling of groundwater at OU1, which is upgradient of Keyes Field, indicate the presence of contaminants at concentrations which exceed Federal and State drinking water standards and therefore also exceed thresholds for a public drinking water supply. As a result, the Risk Assessment qualitatively evaluated future risk for a hypothetical residential use, should groundwater be pumped from Keyes Well and contamination migrate into Keyes Field. The Risk Assessment concluded that under this scenario, Keyes Field would become re-contaminated, and the future use of the Keyes Well as a public water supply would result in unacceptable cancer risks and non-cancer health effects.

Remediation of the upgradient source at the OU1 portion of the Fletcher's Paint Site is expected to begin in 2012. The upgradient petroleum source (Xtramart) is being remediated under State law and contaminant concentrations have since decreased. The contamination associated with these upgradient sources is unlikely to impact Keyes Field groundwater in the future if the Keyes Well remains inactive until these offsite sources are remediated.

WHAT IMPACTS WOULD THIS HAVE ON THE LOCAL COMMUNITY?

There are no impacts to the community from this No Action proposal.

WHY EPA RECOMMENDS THIS CLEANUP PROPOSAL?

EPA recommends that no additional cleanup measures are necessary for groundwater under the Keyes Field because the risk assessment in the OU2 study area reveals that there is no cur-

FLETCHER'S PAINT SUPERFUND SITE HISTORY

1929-1947:	The Town burning dump occupied a portion of the Elm Street area
1949-1991:	Fletcher's Paint manufactured and sold water based paints and solvent based stains from the Elm St. facility; Mill Street property used for storage of paint pigments; late 1960's -1970's storage of scrap pyranol
1984:	Contaminants found in Keyes Municipal Water Supply Well and it was removed from service
1988-1989:	EPA removed 863 drums containing hazardous substances from the Elm Street Area of the Site and placed a temporary cover on PCB contaminated soils
1989:	EPA adds the Fletcher's Paint Works and Storage Facility on the National Priorities List (Superfund list)
1991-1994:	EPA places fence at Elm Street Area to prevent trespassing over contaminated land
	EPA conducts a Remedial Investigations into the nature and extent of contamination and the risks posed by the Site.
1993:	EPA removed and disposed of 512 boxes and 99 additional drums of hazardous materials from site buildings and demolished and disposed of the Mill Street storage shed
1994-1997:	EPA reviewed various approaches to cleanup of Operable Unit 1 and documented these approaches in a Feasibility Study. EPA reviewed approaches proposed by responsible party
1995:	Contaminated surface soil from several residential properties on Mill Street were excavated and disposed of off-site pursuant to an Order issued by EPA to a Potentially Responsible Party (PRP)
1998:	EPA issued a Record of Decision (ROD) for Operable Unit 1 requiring excavation and on-site treatment of soils via thermal desorption and long-term monitoring of groundwater
2001:	EPA demolished the former Fletcher's Paint Elm Street buildings
2001:	EPA issued an Order for a PRP (General Electric) to perform the OU1 cleanup action
2000-2011:	Pursuant to the Order, Pre-Design Work plan, investigations, and preliminary, intermediate and a draft final design have been submitted and reviewed. PRP proposes change from on-site treatment to off-site disposal and submits designs for EPA review
2004-2011:	Remedial investigations and risk assessments are performed for OU2 including the Souhegan River and the Keyes Field groundwater.
2009:	EPA issued an Amended Record of Decision (ROD) for OU 1 changing the remedy and requiring excavation and off-site disposal of the contaminated soils rather than on-site treatment
2011:	EPA releases the OU2 Baseline Human Health and Ecological Risk Assessment on the Souhegan River
2011:	EPA releases the OU2 Remedial Investigation Report including the Keyes Field Human Health Risk Assessment.

rent threat to public health; no future risks related to use of the groundwater under the Keyes Field for a future park user or park worker; and because future risks to public health are primarily related to a residential use of groundwater and the potential migration of contaminants from upgradient sources into the Keyes Field. A previous response action required at the OU1 portion of the Site has eliminated the need for a further remedial response at OU2 as this OU1 response addresses potential future risks to human health from migration of upgradient contamination (Fletchers OU1) to Keyes Field if the Keyes Well was used in the future.

Groundwater under Keyes Field is part of the GMZ to be implemented at OU1which both monitors and restricts groundwater use until cleanup levels are met. It is estimated that following remediation of the soil at OU1, approximately 20 years would be required for groundwater to reach cleanup levels for TCE and 80 years for PCBs. PCBs found in groundwater in bedrock beneath OU1 would take approximately 150 years to meet cleanup levels. The monitoring and groundwater use restrictions within the GMZ at the OU1 portion of the Fletcher's Paint Site are long term measures.

NEXT STEPS

During the fall of 2012, EPA expects to review and evaluate all comments received on this proposal and will sign a Record of Decision for OU2 groundwater at Keyes Field. The ROD is a written document that describes the chosen cleanup plan. The ROD and a summary of responses to any public comments (the Responsiveness Summary) will then be made available to the public at the Wadleigh-Memorial Library, EPA's Record Center in Boston, the NHDES One Stop Website as well as EPA's website for the Fletcher's Paint Site. EPA will announce the final decision on the cleanup plan through the local media and via EPA's website.

EPA is currently completing a Feasibility Study on the various approaches to address contamination in sediment in the Souhegan River and

will release a proposed plan to address the contaminated sediments in 2013.

WHAT IS A FORMAL COMMENT?

EPA will accept public comments during a 30-day formal comment period – August 23 through September 24, 2012. EPA considers and uses these comments to improve and understand support for its cleanup approach. EPA will hold an informational meeting prior to the start of the formal Public Hearing. EPA can accept written comments via mail, email, and fax. Additionally, verbal comments may be made during the formal Public Hearing on September 12, 2012 during which a stenographer will record all offered comments during the hearing. EPA will not respond to your comments during the formal Public Hearing.

EPA will review the transcript of all formal comments received at the hearing, and all written comments received during the formal comment period, before making a final cleanup decision. EPA will then prepare a written response to all the formal written and oral comments received. Your formal comment will become part of the official public record. The transcript of comments and EPA's written responses will be issued in a document called a Responsiveness Summary when EPA releases the final cleanup decision, in a document referred to as the Record of Decision. The Responsiveness Summary and Record of Decision will be made available to the public on-line, at the Wadleigh-Memorial Library, the EPA Records Center in Boston, the NHDES One Stop Website as well as EPA's website for the Fletcher's Paint Site. EPA will announce the final decision on the cleanup plan through the local media and via EPA's website.

FOR MORE DETAILED IN-FORMATION:

The Administrative Record, which includes all documents that EPA has considered or relied

upon in proposing this no action cleanup plan for groundwater at Keyes Field for OU2 at the Fletcher's Paint Site, is available for public review and comment at the following locations:

EPA Records and Information Center 5 Post Office Square, First Floor Boston, MA 02109-3912 617-918-1440

Wadleigh Memorial Library 49 Nashua Street Milford, NH 03055

Key Information is also available for review online at www.epa.gov/region1/superfund/sites/ fletcher

SEND US YOUR COMMENTS

Provide EPA with your written comments about this No Action Proposed Plan for OU2 at the Fletcher's Paint Superfund Site.

Please email (sprague.cheryl@epa.gov), fax (617-918-0244), or mail comments, postmarked no later than Monday, September 24, 2012 to:

Cheryl Sprague EPA Region New England 5 Post Office Square, Suite 100 Mail Code OSRR07-1 Boston, MA 02109-3912

In accordance with Section 117 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the law that established the Superfund program, this document summarizes EPA's cleanup proposal. Detailed information on the investigations, cleanup and other documents contained in the Site's Administrative Record, are available for review at the Site information repositories at the Wadleigh Memorial Library,49 Nashua Street, Milford, NH, 03055 and EPA New England Records Center, 5 Post Office Sq., First Floor, Boston, MA or online at www.epa.gov/region1/superfund/sites/fletcher.